Telangana Growth Analysis

Problem Statement

Telangana is one of the fastest-growing states in India and one of the states with an open data policy.

Peter Pandey is an aspiring data analyst wanted to analyse Telangana's growth among different sectors quantitatively and provide useful Insights to the Telangana government that would help them to make data-informed decisions that would further support the growth of the state.

Objective

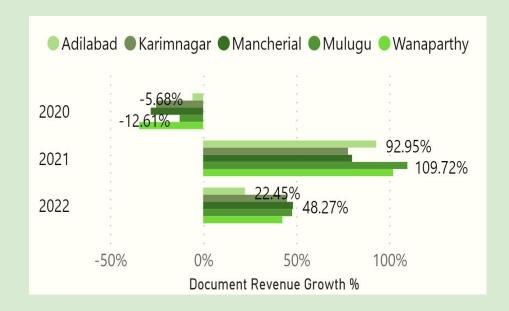
- Explore Stamp Registration, Transportation and Ts-Ipass Datasets. Understand their attributes, categories and time period.
- Analyze trends and patterns within each department.
- Identify growth opportunities and areas needing attention.
- Find correlation among these departments and report the overall growth of the state through insights and relevant visuals such as shape maps

Stamp Registration

Document Registration Revenue generated across districts in Telangana



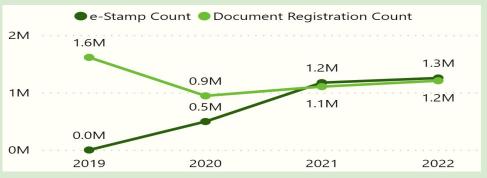
Top 5 districts that showed the highest Document Registration Revenue growth between FY 2019 and 2022



Top 5 districts where e-stamps revenue contributes significantly more to the revenue than the documents in FY 2022

e-Stamp challan count and document registration count pattern



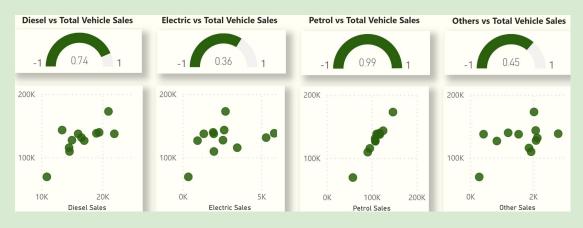


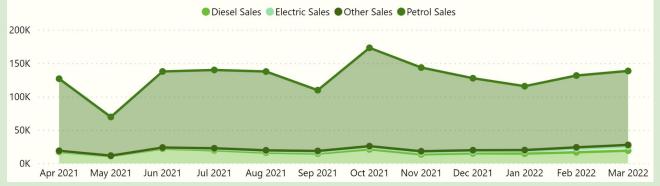
The revenue generated from document registration compare to the revenue generated from e-stamp challans across districts ~ 48-52% and vice versa

Districts can be classified into Silver(low), Gold(medium) and Platinum(high) based on their stamp registration revenue generation

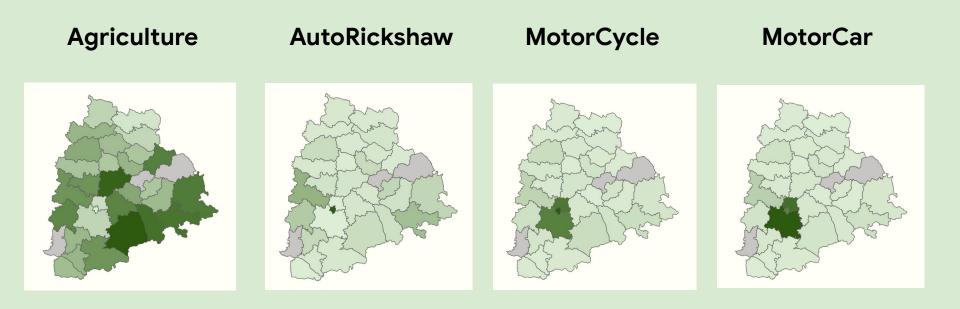
Transportation

Correlation between vehicle sales and specific months for various fuel types





Distribution of vehicles across different districts



Top 3 and bottom 3 districts that have shown the highest and lowest vehicle sales growth during FY 2022 compared to FY 2021?

Vehicle Sales Growth between FY 22 & FY 21 - Petrol

District	22	21	Change %
Rangareddy	200289	184204	8.73%
Medchal_Malkajgiri	200121	201947	-0.90%
Hyderabad	231166	228817	1.03%

District	22	21	Change % ▼
Jagtial	14836	24945	-40.53%
Nirmal	11640	19746	-41.05%
Warangal	19704	36035	-45.32%

Vehicle Sales Growth between FY 22 & FY 21 - Diesel

District	22	21	Change %
Karimnagar	10644	5034	1.11
Rangareddy	27843	24711	0.13
Sangareddy	9275	8193	0.13

District	22	21	Change %
Jangoan	2461	3155	-0.22
Mahabubabad	3170	4187	-0.24
Warangal	2971	5717	-0.48

Vehicle Sales Growth between FY 22 & FY 21 - Electric

	District	22	21	Change %
	Suryapet	670	193	2.47
1	Khammam	759	149	4.09
	Bhadradri Kothagudem	290	76	2.82

District	22	21	Change %
Wanaparthy	154	146	0.05
Mancherial	236	198	0.19
Rajanna Sircilla	416	362	0.15

TS- Ipass

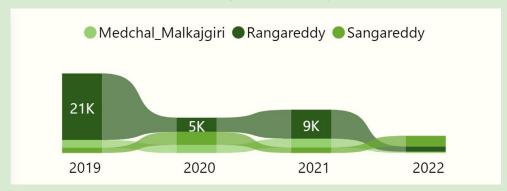
Top 5 sectors that have witnessed the most significant investments in FY 2022

Sector	Investement'22 (Cr.)
Plastic and Rubber	2,261.03
Pharmaceuticals and Chemicals	432.44
Food Processing	494.01
Engineering	731.73
Automobile	1,261.54

Relationship b/w district investments, vehicles sales and stamps revenue

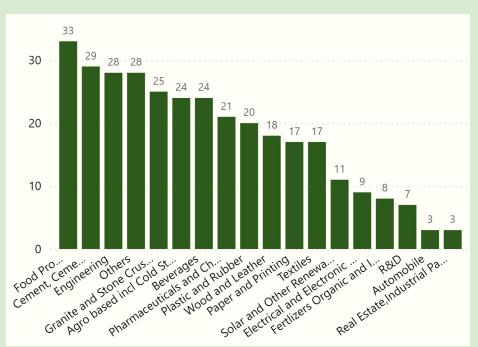


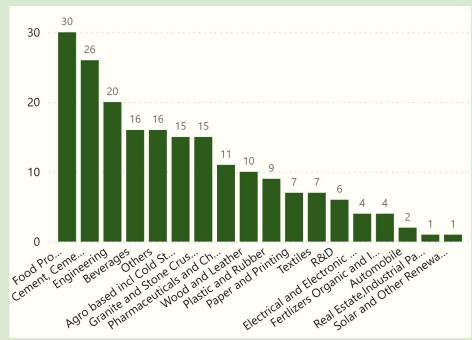
Top 3 districts having most significant sector investments during FY 2019 to 2022



Sectors that have shown substantial investment in multiple districts b/w FY 21 & '22

FY 2021 FY 2022



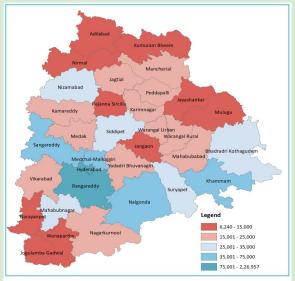


Additional Insights

Top 5 districts to buy commercial properties in Telangana

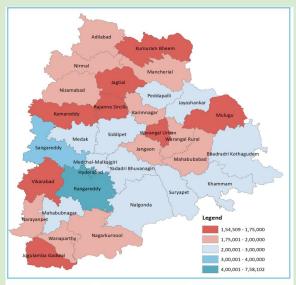
- -Hyderabad
- -Ranga Reddy
- -Medchal-Malkajgiri
- -Sangareddy
- -Nalgonda

Gross District Domestic Product (GDDP) at Current Prices (Rs. Crores)



District	2021-22 (FRE)	District	2021-22 (FRE)	District	2021-22 (FRE)
Mulugu	6,240	Warangal Rural	16,365	Mahabubnagar	25,97
Kumuram Bheem	9,599	Vikarabad	16,948	Siddipet	25,99
Narayanpet	10,848	Nagarkurnool	18,203	Suryapet	26,19
Rajanna Siricilla	11,022	Jagtial	18,702	Bhadradri Kothagudem	29,92
Jangaon	11,667	Mancherial	18,850	Nizamabad	32,47
Wanaparthy	11,833	Peddapalli	19,767	Khammam	36,77
Jogulamba Gadwal	11,922	Kamareddy	19,795	Nalgonda	46,15
Jayashankar	11,942	Warangal Urban	20,018	Sangareddy	55,51
Nirmal	14,759	Medak	21,068	Medchal-Malkajgiri	73,13
Adilabad	14,903	Yadadri Bhuvanagiri	22,607	Hyderabad	1,86,22
Mahabubabad	16,280	Karimnagar	23,783	Rangareddy	2,26,95

Per Capita Income (PCI) at Current Prices (Rupees)



District	2021-22 (FRE)	District	2021-22 (FRE)	District	2021-22 (FRE)
Vikarabad	1,54,509	Adilabad	1,77,160	Khammam	2,21,804
Warangal Urban	1,56,086	Mulugu	1,77,316	Bhadradri Kothagudem	2,29,951
Kumuram Bheem	1,57,258	Mahabubabad	1,79,222	Medak	2,30,689
Jagtial	1,61,064	Nagarkurnool	1,80,742	Jayashankar	2,34,818
Narayanpet	1,65,384	Jangaon	1,86,278	Mahabubnagar	2,37,274
Jogulamba Gadwal	1,67,207	Mancherial	1,93,516	Nalgonda	2,41,280
Rajanna Siricilla	1,68,302	Warangal Rural	1,94,317	Medchal-Malkajgiri	2,45,232
Kamareddy	1,73,313	Karimnagar	1,98,588	Yadadri Bhuvanagiri	2,47,211
Nizamabad	1,75,361	Suryapet	2,02,467	Sangareddy	3,01,870
Wanaparthy	1,75,445	Peddapalli	2,03,363	Hyderabad	4,02,941
Nirmal	1,77,158	Siddipet	2,19,109	Rangareddy	7,58,102

B/w FY 2018 and FY 2022

Telangana current Government introduced the TS-iPass scheme **TS-iPASS** is a certification service to establish industries. manufacturing, and services, in the state of Telangana, India. The process allows a single mechanism for doing business with the state. including obtaining required permissions within stipulated timelines.

Sector	Number of Employees
Wood and Leather	3594
Thermal Power Plant	9
Textiles	10182
Solar and Other Renewable Energy	3926
Real Estate,Industrial Parks and IT Buildings	352592
R&D	20146
Plastic and Rubber	23301
Pharmaceuticals and Chemicals	73841
Paper and Printing	8675
Others	17646
Granite and Stone Crushing	16748
Food Processing	40548
Fertlizers Organic and Inorganic,Pesticides,Insecticides, and Other Related	2325
Engineering	43093
Electrical and Electronic Products	9245
Cement, Cement & Concrete Products, Fly Ash Bricks	13438
Beverages	7468
Automobile	15574
Agro based incl Cold Storages	12730
Total	675081

5 Insights:

- Ranga Reddy, Medchal-Malkajgiri and Hyderabad give highest e-Stamp Revenue generated for FY 22
- Ranga Reddy, Medchal-Malkajgiri and Hyderabad give highest vehicle sales generated for FY 22
- Real estate investments are predominantly in Ranga Reddy district
- People prefer petrol fuel type for their vehicles
- Agricultural vehicles are mostly used in Nalgonda, Siddipet, Suryapet, Khammam

5 Recommendations:

- We can increase the contribution of Stamp registration in Kumuram Bheem Asifabad, Bhadradri Kothagudem, Narayanpet districts
- We can increase the contribution of Fuel sales in Kumuram Bheem Asifabad, Rajanna Sricilla, Jangoan districts
- We can increase the employment in Thermal Power Plant, Fertilizers, Wood and Leather and Solar and other renewable energy sectors
- We can increase the manufacturing capacity of vehicles with 1-4 seat capacity
- We can increase the manufacturing capacity of Transport category vehicles

Please find the dashboard link here <u>here</u>

-By Esther Ethel S